

[PICTURES IN CLINICAL MEDICINE]

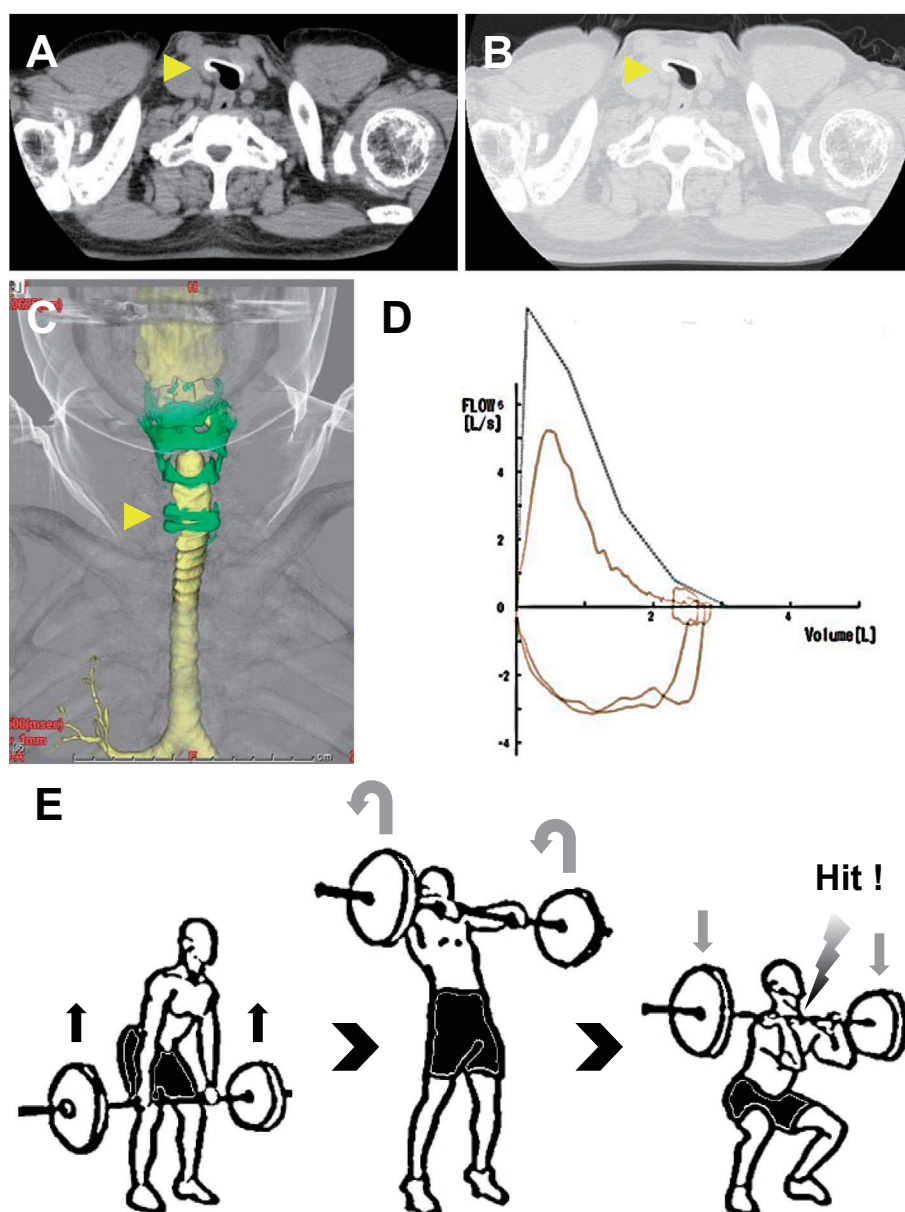
Wheezing and Weightlifting

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Key words: wheezing, weightlifting, tracheal calcification, neck trauma

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Picture.

An 83-year-old man was referred to our hospital upon gradual worsening of wheezing. Chest computed tomography (CT) showed cervical tracheal deformity and airway narrowing (Picture A, B). CT-derived reconstructed three-dimensional images confirmed the abnormal calcification of the tracheal cartilage just below the cricoid cartilage (Picture C; green and yellow areas indicate Hounsfield units of cartilage and air, respectively). The inspiratory phase of the flow-volume curve also showed a flattening tendency (Picture D). The patient was an active weightlifter, and the barbell sometimes hit his neck during “clean” maneuvers (lifting the barbell to shoulder height, Picture E). We diagnosed him with chronic tracheal injury due to repeated blunt trauma during weightlifting. Tracheal calcification is divided into diffuse [mainly associated with senescence and seen in older women (1)] and focal [suggests underlying diseases, such as tracheobronchopathia-osteochondroplastica and amyloidosis (2)]. In our patient, focal tracheal calcification at the height of the clavicular bone was caused by blunt tracheal

injury induced by repeated execution of the “clean” maneuver. Aside from exercise-induced asthma, this is the first case report showing the association between weightlifting and wheezing.

The authors state that they have no Conflict of Interest (COI).

References

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2. Chung JH, Kanne JP, Gilman MD. CT of diffuse tracheal diseases. *Am J Roentgenol* **196**: 240-246, 2011.

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